

What is claimed is:

1. In an inflator device including: a housing defining a storage chamber; a supply of gas generant material disposed within the storage chamber; and an initiator assembly joined to the housing and including an initiator in actuating communication with the supply of gas generant material, the improvement comprising:

a moisture barrier member disposed between the initiator assembly and the supply of gas generant material, wherein the moisture barrier member prevents moisture transmission from the initiator assembly to the supply of gas generant material, and wherein upon actuation of the initiator the moisture barrier member ruptures.

2. The inflator device of claim 1 wherein the supply of gas generant material comprises a plurality of gas generant material bodies having a form selected from a group consisting of tablets, wafers, extrudlets and combinations thereof.

3. The inflator device of claim 1, wherein the moisture barrier member prevents direct contact of the supply of gas generant material with the initiator when the inflator device is in a static state prior to actuation of the initiator.

4. The inflator device of claim 1 wherein the moisture barrier member comprises a deformable material.

5. The inflator device of claim 4 wherein the deformable material comprises ethylene propylene rubber.

6. The inflator device of claim 1 wherein the moisture barrier member is planar.

7. The inflator device of claim 1 wherein the moisture barrier member is non-planar.

8. The inflator device of claim 7 wherein the non-planar moisture barrier member includes a first surface facing the initiator assembly, an opposed second surface facing the supply of gas generant material and an outer edge and wherein the moisture barrier member additionally includes a sleeve portion extending from the moisture barrier member outer edge.

9. The inflator device of claim 8 wherein the non-planar moisture barrier member is an integrally molded one piece member.

10. The inflator device of claim 8 wherein the non-planar moisture barrier member also includes a base portion and a cup portion and wherein the non-planar moisture barrier member is disposed adjacent the initiator assembly with the cup portion in covering relation with at least a portion of the initiator.

11. The inflator device of claim 10 wherein the non-planar moisture barrier member is an integrally molded one piece member.

12. The inflator device of claim 10 wherein:
the cup portion comprises a side wall and an end wall;
the moisture barrier member base portion has a first thickness and the cup portion end wall has a second thickness; and
the second thickness is less than the first thickness.

13. The inflator device of claim 7 wherein the non-planar moisture barrier member includes a base portion and a cup portion and wherein the non-planar moisture barrier member is disposed adjacent the initiator assembly with the cup portion in covering relation with at least a portion of the initiator.

14. The inflator device of claim 13 wherein the non-planar moisture barrier member is an integrally molded one piece member.

15. The inflator device of claim 1 wherein at least a portion of the supply of the gas generant material is coated with an igniter material.

16. An inflator device, comprising:
a housing defining a storage chamber having an inner surface;
a supply of gas generant material disposed within the storage chamber;
an initiator assembly joined to the housing, the initiator assembly including an initiator in actuating communication with the supply of gas generant material; and

a non-planar moisture barrier member disposed between the initiator assembly and the supply of gas generant material, the non-planar moisture barrier member including:

a base portion having a first surface facing the initiator assembly and a second surface on a side opposite the first surface and facing the supply of gas generant material;

an outer edge adjacent the storage chamber inner surface;

a sleeve extending from the moisture barrier member outer edge; and

a cup portion extending from the base portion second surface, wherein the non-planar moisture barrier member is disposed adjacent the initiator assembly with the cup portion in covering relation with at least a portion of the initiator;

wherein the non-planar moisture barrier member prevents moisture transmission from the initiator assembly to the supply of gas generant material and wherein upon actuation of the initiator the non-planar moisture barrier member ruptures.

17. The inflator device of claim 16 wherein the moisture barrier member comprises a deformable material.

18. The inflator device of claim 17 wherein the deformable material comprises ethylene propylene rubber.

19. The inflator device of claim 16, wherein the moisture barrier member prevents direct contact of the supply of gas generant material with the initiator when the inflator device is in a static state prior to actuation of the initiator.

20. The inflator device of claim 16 wherein the non-planar moisture barrier member is an integrally molded one piece member.

21. An inflator device comprising:
a housing defining a storage chamber having an inner surface;

a baffle at least partially disposed within the storage chamber, the baffle including a passageway and a plurality of exit holes;

a supply of gas generant material within the storage chamber and outside the baffle passageway;

an initiator assembly joined to the housing, the initiator assembly including an initiator in actuating communication with the supply of gas generant material, wherein the initiator is contained at least in part in the baffle passageway; and

a non-planar moisture barrier member disposed between the initiator assembly and the supply of gas generant material, the non-planar moisture barrier member including:

a base portion having a first surface facing the initiator assembly and a second surface on a side opposite the first surface and facing the supply of gas generant material;

an outer edge adjacent the storage chamber inner surface;

a sleeve extending from the moisture barrier member outer edge; and

a cup portion extending from the base portion second surface, wherein the non-planar moisture barrier member is disposed adjacent the initiator assembly with the cup portion in covering relation with at least a portion of the initiator and at least a portion of the cup portion disposed between the initiator and an inside surface of the baffle;

wherein the non-planar moisture barrier member prevents moisture transmission from the initiator assembly to the supply of gas generant material and wherein upon actuation of the initiator the cup portion of the non-planar moisture barrier member ruptures.

22. The inflator device of claim 21 wherein the moisture barrier member comprises a deformable material.

23. The inflator device of claim 22 wherein the deformable material comprises ethylene propylene rubber.

24. The inflator device of claim 22, wherein the moisture barrier member prevents direct contact of the supply of gas generant material with the initiator assembly.

25. The inflator device of claim 22 wherein the non-planar moisture barrier member is an integrally molded one piece member.